

Title (en)

Inspection equipment for fine pattern and morphology using microcolumn

Title (de)

Untersuchungsgeräte für feine muster und morphologie unter verwendung einer mikrosäule

Title (fr)

Équipement d'inspection pour motif fin et morphologie utilisant une micro-colonne

Publication

**EP 1910891 A1 20080416 (EN)**

Application

**EP 06783468 A 20060731**

Priority

- KR 2006003010 W 20060731
- KR 20050070084 A 20050730

Abstract (en)

[origin: WO2007015615A1] Inspection equipment using a microcolumn is disclosed. The inspection equipment of the present invention can conduct inspection of a fine circuit, which could not be conducted using conventional optical inspection equipment. Furthermore, the present invention can rapidly inspect a display, having a relatively large area, and can have a precise inspection function and a repair function. The inspection equipment of the present invention includes a plurality of microcolumns, a shaft, to which the microcolumns are coupled, and which is disposed in a direction perpendicular to a direction in which an object is moved, and a detector for detecting electron beams radiated from the microcolumns onto the object to determine whether errors exist in a circuit of the object.

IPC 8 full level

**G09G 3/00** (2006.01); **G02F 1/13** (2006.01); **G02F 1/1362** (2006.01); **G09G 3/36** (2006.01); **H01J 37/28** (2006.01)

CPC (source: EP KR US)

**G02F 1/13** (2013.01 - KR); **G02F 1/1303** (2013.01 - EP US); **G09G 3/006** (2013.01 - EP US); **H01J 37/28** (2013.01 - EP US); **G02F 1/1309** (2013.01 - EP US); **G02F 1/136254** (2021.01 - EP US); **G02F 2203/69** (2013.01 - EP US); **G09G 3/3648** (2013.01 - EP US); **H01J 2237/2817** (2013.01 - EP US)

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)

**WO 2007015615 A1 20070208**; CN 101233444 A 20080730; CN 101233444 B 20101208; EP 1910891 A1 20080416; EP 1910891 A4 20090610; EP 1910891 B1 20140716; JP 2009503495 A 20090129; JP 5362355 B2 20131211; KR 101011242 B1 20110126; KR 20080043768 A 20080519; KR 20090119763 A 20091119; US 2008272298 A1 20081106; US 7935926 B2 20110503

DOCDB simple family (application)

**KR 2006003010 W 20060731**; CN 200680028006 A 20060731; EP 06783468 A 20060731; JP 2008523810 A 20060731; KR 20087002543 A 20080130; KR 20097018426 A 20060731; US 99731606 A 20060731